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New Curculionoidea (Coleoptera) records for Quebec, Canada

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Abstract

The following species of Curculionoidea are newly recorded from the Canadian province of Quebec: *Coelocephalapion emaciipes* (Fall, 1898); *Ischnopterapion virens* (Herbst, 1797); *Omphalapion hookerorum* (Kirby, 1808); *Perapion punctinasum* (J.B. Smith, 1884) (all Brentidae); *Anthonomus robustulus* LeConte, 1876; *Pseudanthonomus helvolus* (Boheman, 1843); *Bagous magister* LeConte, 1876; *Bagous tanneri* O'Brien, 1979; *Buchananius striatus* (LeConte, 1876); *Ceutorhynchus bolteri* Dietz, 1896; *Ceutorhynchus pallidactylus* (Marsham, 1802); *Ceutorhynchus pauxillus* Dietz, 1896; *Conotrachelus buchanani* Schoof, 1942; *Conotrachelus pusillus* LeConte, 1878; *Conotrachelus recessus* (Casey, 1910); *Curculio rubidus* (Gyllenhal, 1835); *Cylindrocopturus longulus* (LeConte, 1876); *Hadroplontus litura* (Fabricius, 1775); *Hypera rumicis* (Linnaeus, 1758); *Lixus terminalis* LeConte, 1876; *Myosides seriehispidus* Roelofs, 1873; *Phloeotribus dentifrons* (Blackman, 1921); *Plocamus echidna* (LeConte, 1876); *Scolytus muticus* Say, 1824; *Sirocalodes sericans* (LeConte, 1876); *Smicronyx sculpticollis* Casey, 1892 (all Curculionidae). Among these, *Buchananius striatus*, *Conotrachelus buchanani*, *Conotrachelus pusillus*, and *Curculio rubidus* (all Curculionidae) are also recorded from Canada for the first time. The latter is also newly reported from Ontario. Collecting data are provided for *Lixus punctinasus* LeConte, 1876, previously reported to occur

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in Canada without any further information, and for *Choragus sayi* LeConte, 1876 (Anthribidae) and *Rhyssomatus aequalis* Horn, 1873 (Curculionidae), both previously recorded from Quebec, also without further details.

Résumé

Les auteurs mentionnent pour la première fois la présence au Québec des espèces de Curculionoidea suivantes : *Coelocephalapion emaciipes* (Fall, 1898); *Ischnopterapion virens* (Herbst, 1797); *Omphalapion hookerorum* (Kirby, 1808); *Perapion punctinasum* (J.B. Smith, 1884) (tous des Brentidae); *Anthonomus robustulus* LeConte, 1876; *Pseudanthonomus helvolus* (Boheman, 1843); *Bagous magister* LeConte, 1876; *Bagous tanneri* O'Brien, 1979; *Buchananius striatus* (LeConte, 1876); *Ceutorhynchus bolteri* Dietz, 1896; *Ceutorhynchus pallidactylus* (Marsham, 1802); *Ceutorhynchus pauxillus* Dietz, 1896; *Conotrachelus buchanani* Schoof, 1942; *Conotrachelus pusillus* LeConte, 1878; *Conotrachelus recessus* (Casey, 1910); *Curculio rubidus* (Gyllenhal, 1835); *Cylindrocopturus longulus* (LeConte, 1876); *Hadroplontus litura* (Fabricius, 1775); *Hypera rumicis* (Linnaeus, 1758); *Lixus terminalis* LeConte, 1876; *Myosides seriehispidus* Roelofs, 1873; *Phloeotribus dentifrons* (Blackman, 1921); *Plocamus echidna* (LeConte, 1876); *Scolytus muticus* Say, 1824; *Sirocalodes sericans* (LeConte, 1876); *Smicronyx sculpticollis* Casey, 1892 (tous des Curculionidae). Parmi ces espèces, *Buchananius striatus*, *Conotrachelus buchanani*, *Conotrachelus pusillus* et *Curculio rubidus* (tous des Curculionidae) sont également mentionnés pour la première fois comme étant présents au Canada et, dans le cas de la dernière espèce, également en Ontario. Des données de collecte sont fournies pour *Lixus punctinasus* LeConte, 1876, déjà répertorié au Canada sans données de capture, ainsi que pour *Choragus sayi* LeConte, 1876 (Anthribidae) et *Rhyssomatus aequalis* Horn, 1873 (Curculionidae), dont la présence avait déjà été signalée au Québec, également sans données de capture.

Keywords

Curculionoidea, Anthribidae, Brentidae, Curculionidae, new records, Canada, Quebec, Ontario, weevils

Introduction

Douglas et al. (2013) recently reported five Brentidae and 29 Curculionidae species new to Quebec (of which 3 and 11 were new to Canada, respectively), increasing the total number of species of each family known to occur in the province to 22 and 386, respectively (Bousquet et al. 2013). Recent collection efforts, mainly by amateur entomologists, have since yielded new findings. The new records and new documented record (*Lixus punctinasus* LeConte, 1876) reported herein (4 Brentidae and 23 Curculionidae), listed according to the classification of Bouchard et al. (2011), bring these totals to 26 and 409, respectively. Additions to the province's weevil fauna will undoubtedly be recorded in the years to come not only due to increased collection efforts, but as more species continue to expand their range northwardly under present global warming conditions or are being introduced from other countries. Among the species newly reported here, *Ischnopterapion virens* (Herbst, 1797), *Omphalapion hookerorum* (Kirby, 1808), *Ceutorhynchus pallidactylus* (Marsham, 1802),

Curculio rubidus (Gyllenhal, 1835), *Hadroplontus litura* (Fabricius, 1775), *Myosides seriehispidus* Roelofs, 1873, and *Hypera rumicis* (Linnaeus, 1758) are all adventive species (*sensu* Wheeler and Hoebeke 2009) that were accidentally introduced in Canada or intentionally brought in as biological control agents.

Materials and methods

Specimens belonging to species recorded or referred to in the present article were identified (or their identity was confirmed) by recognized specialists listed henceforth under each species name by their name, or if an author of this paper, by their initials.

Label data are provided in chronological order for every species. These data were translated from French to English, and various details (e.g., current regional county municipality [MRC], collecting technique, general habitat), when known, have been added between brackets.

Specimens were either swept or beaten from various plant species, attracted to mercury vapour, ultraviolet or porch lights or handpicked from various substrates or from a flight interception trap made of tulle fabric (~2,5m x 10m) held between two wood piles or set up in a suburban backyard.

Plant family, generic and specific names follow the classification used in Database of Vascular Plants of Canada (VASCAN) (http://data.canadensys.net/vascan/search).

Acronyms of collections referred to in this article are as follows:

CCCH Claude Chantal Insect Collection (private collection), Varennes, Quebec, Canada

CCOB Charles W. O'Brien Insect Collection (private collection), Green Valley, Arizona, United States

CCTE Claude Tessier Insect Collection (private collection), Quebec, Quebec, Canada

CHMS Henri Miquet-Sage Insect Collection (private collection), Mont-Saint-Hilaire, Quebec, Canada

CMNC Canadian Museum of Nature, Ottawa, Ontario, Canada

CNCI Canadian National Collection of Insects, Arachnids, and Nematodes, Agriculture and Agri-Food Canada Research Centre, Ottawa, Ontario, Canada

CPTO Pierre de Tonnancour Insect Collection (private collection), Terrasse-Vaudreuil, Quebec, Canada

CRVI Robert Vigneault Insect Collection (private collection), Oka, Quebec, Canada

CSDU Stéphane Dumont Insect Collection (private collection), Montreal, Quebec, Canada

CSLA Serge Laplante Insect Collection (private collection), Gatineau, Quebec, Canada

Results

Family Anthribidae Billberg, 1820
Subfamily Choraginae Kirby, 1819
Tribe Choragini Kirby, 1819

Choragus sayi LeConte, 1876, new data supporting first record for Quebec

Species identification confirmed by RSA, 2015 and 2016

Note. Bousquet et al. (2013) recorded this species from Quebec without any further comment, possibly on the basis of a vague record ("Quebec to Georgia west to Indiana and Texas") by Valentine (1998). This small species is strongly saltatorial and can be difficult to catch in hot weather. We provide, for the first time, data on the occurrence of this species in the province.

Specimen data. [Agglomération de Longueuil] Longueuil, 18-VII-1992, C. Chantal (1, CCCH); [MRC Marguerite-d'Youville] Varennes, 16-VII-1999, attracted to UV light, C. Chantal (1, CCCH); same except: 29-VI-2006 (1, CCCH); [MRC Brome-Missisquoi] Saint-Armand, 2-VIII-2007, understory, on foliage, C. Chantal (1, CCCH); [MRC Marguerite-D'Youville] Île Sainte-Thérèse, 1-IX-2009, C. Chantal (1, CCCH); [MRC Deux-Montagnes] Parc national d'Oka, La Grande Baie, 19-VII-2014, beaten from dead branches over forest litter, R. Vigneault (3, CRVI); [MRC Coaticook] Compton, 25-VIII-2014, C. Levesque (1, CNCI); [MRC Deux-Montagnes] Parc national d'Oka, La Grande Baie, 27-VI-2015, beaten from dead branches over forest litter, R. Vigneault (1, CRVI); same except: 30-VI-2015 (16:00), P. de Tonnancour (1, CPTO); same except: 2-VII-2015, R. Vigneault (1, CRVI); same except: 5-VII-2015 (16:00), beaten from dead branches of *Acer saccharum*, P. de Tonnancour & R. Vigneault (1, CMNC; 4, CPTO; 6, CRVI); same except: 9-VII-2015, R. Vigneault (2, CRVI); [MRC Deux-Montagnes] Parc national d'Oka, Calvaire, 25-VI-2016, beaten from dead branches over forest litter, R. Vigneault (3, CRVI); same except: 1-VII-2016 (19, CRVI); same except: La Grande Baie, 6-VII-2016, beaten from dead branches of *Acer saccharum*, R. Vigneault (11, CPTO); same except: La Grande Baie, 6-VII-2016, beaten from dead branches over forest litter, R. Vigneault (1, CRVI), 12-VII-2016 (1, CRVI), and 1-VIII-2016 (1, CRVI).

Family Brentidae Billberg, 1820
Subfamily Apioninae Schönherr, 1823
Tribe Apionini Schönherr, 1823

Perapion punctinasum (J.B. Smith, 1884), new to Quebec

Species identification confirmed by RSA, 2016

Note. This native species is easily separated from all other Apioninae known to occur in Quebec by the conspicuous elongate postscutellar spot of white vestiture and spot of dense white scales at the base of elytral interstriae 2 and 3. Nothing is known of its habits or life history, except that adults were collected in August on dock, *Rumex* L. spp., including golden dock, *Rumex persicarioides* L. (Polygonaceae) (Bright 1993). Ontario was until now considered as the eastward limit of its range in Canada (Bousquet et al. 2013). A photograph of one of the specimens reported herein is posted on bugguide.net (http://bugguide.net/node/view/1077586/bgpage).

Specimen data. [MRC Deux-Montagnes] Parc national d'Oka, composting site, 29-V-2015, white tulle fabric flight interception trap, R. Vigneault (2, CRVI).

Omphalapion hookerorum (Kirby, 1808), new to Quebec

Species identification confirmed by RSA, 2015

Note. This Palaearctic adventive species was recorded for the first time in North America in 1993 based on specimens collected in Nova Scotia in 1990 (Peschken 1993 and Sampson and MacSween 1993, *in* Majka et al. 2007b). In Canada, it was subsequently released and is established as a biological control agent against scentless chamomile, *Tripleurospermum inodorum* (L.) Sch.Bip. (= *Matricaria perforata* Mérat) (Asteraceae) in British Columbia, Alberta, Saskatchewan, and Manitoba (McClay and De Clerck-Floate 1999). It was also collected on stinking chamomile, *Anthemis cotula* L. (Asteraceae), in Nova Scotia (Majka et al. 2007b).

Specimen data. [MRC La Vallée-du-Richelieu] Saint-Charles-sur-Richelieu, 29-VI-2003, H. Miquet-Sage (3, CHMS; 1, CPTO); [MRC Marguerite-D'Youville] Varennes, 30-VI-2008, C. Chantal (2, CCCH); [MRC La Vallée-du-Richelieu] Mont-Saint-Hilaire, 2-VII-2008, H. Miquet-Sage (2, CHMS); [MRC Marguerite-D'Youville] Varennes, 2-V-2010, C. Chantal (2, CCCH; 1, CPTO); same except: 20-V-2010 (1, CCCH), and 9-VI-2010 (1, CCCH); [MRC La Vallée-du-Richelieu] Mont-Saint-Hilaire, 13-VI-2010, H. Miquet-Sage (1, CPTO); [MRC Marguerite-D'Youville] Varennes, 30-V-2011, C. Chantal (1, CCCH); same except 9-VI-2012 (1, CCCH), and 21-V-2014 (1, CCCH); [MRC La Vallée-du-Richelieu] Mont-Saint-Hilaire, 12-V-2014, H. Miquet-Sage (1, CHMS); same except: 20-VI-2014 (1, CHMS), and 25-VI-2014 (1, CHMS); [MRC Marguerite-D'Youville] Varennes, 7-VI-2015, C. Chantal (1, CCCH).

Ischnopterapion virens (Herbst, 1797), new to Quebec

Species identification confirmed by RSA, 2016

Note. Widely distributed through most of the Palaearctic region (Alonso-Zarazaga 2011), this adventive species was recorded for the first time in North America in

1994, in Pennsylvania (Hoebeke et al. 2000). Until now, it was known to occur in Canada only in the Maritime Provinces (Bousquet et al. 2013). It is considered a pest of clovers, *Trifolium* L. spp. (Fabaceae). It can be distinguished from the superficially similar *Stenopterapion meliloti* Kirby, 1808, by its smaller size and the bluish colour of its pronotum and venter (black in *S. meliloti*). As indicated by Hoebeke et al. (2000) and by the label data provided hereafter, the flight season extends until late in the year.

Specimen data. [MRC Haut-Richelieu] Henryville [dike adjacent to Réserve écologique Marcel-Raymond], 29-IX-2012, C. Chantal (2, CCCH); same except: 3-X-2013 (3, CCCH); MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 15-IX-2014 (15:00), white tulle fabric flight interception trap, P. de Tonnancour (1, CPTO); same except: 7-X-2014 (15:00) (1, CPTO) and 12-X-2014 (17:00) (1, CPTO); [MRC Coaticook] Waterville, 11-VII-2015, H. Miquet-Sage (1, CHMS); MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 21-IX-2015 (12:30), white tulle fabric flight interception trap, P. de Tonnancour (1, CPTO); [MRC Marguerite-D'Youville] Varennes, 21-IX-2015, C. Chantal (1, CCCH); MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 22-IX-2015 (15:00), white tulle fabric flight interception trap, P. de Tonnancour (1, CPTO); same except, 22-IX-2015 (15:00), beaten from *Oidium* infected foliage of *Helianthus strumosus*, (1, CPTO); same except: 27-IX-2015 (11:30, 13:30), white tulle fabric flight interception trap (2, CPTO); same except: 6-X-2015 (16:15) (1, CPTO), and 7-X-2015 (14:30–15:30) (3, CPTO); same except: 11-X-2015 (15:00), beaten from *Oidium* infested foliage of *Helianthus strumosus* (1, CPTO); same except: 12-X-2015 (11:00–15:00), white tulle fabric flight interception trap (8, CPTO; 2, CSDU); same except: 5-XI-2015 (14:00–15:00), climbing on pale house exterior wall (1, CPTO; 1, CRVI); same except: 6-XI-2015 (15:00) (1, CPTO), 9-XI-2015 (15:00) (1, CPTO), 19-XI-2015 (12:00) (1, CPTO), 26-XI-2015 (13:00) (1, CPTO), 27-XI-2015 (12:30) (1, CCCH), 11-XII-2015 (13:00–15:00) (4, CPTO), and 12-XII-2015 (12:00) (1, CPTO); Montreal, Parc Zotique-Racicot (45.5427, -73.6903), 11-V-2106, swept from *Trifolium* sp., S. Dumont (6, CSDU); same except: 12-V-2016 (3, CSDU); MRC Haut-Richelieu, Henryville, dike adjacent to Réserve écologique Marcel-Raymond], 12-V-2016 (13:00–16:00), swept from grasses, *Equisetum* and *Solidago*, P. de Tonnancour (1, CPTO); MRC Vaudreuil-Soulanges, Notre-Dame-de-l'Île-Perrot, 20-V-2016 (17:00), swept from *Trifolium pratense*, P. de Tonnancour (11, CPTO); Montreal, Parc Zotique-Racicot (45.5427, -73.6903), 23-V-2106, swept from *Trifolium* sp., S. Dumont (5, CSDU); same except: 24-V-2016 (2, CSDU); MRC Brome-Missisquoi, Saint-Armand, 25-V-2016 (16:00), swept from *Trifolium pratense*, P. de Tonnancour (6, CPTO); MRC Vaudreuil-Soulanges, Saint-Lazare, 29-VI-2013 (16:00–17:00), swept from *Trifolium pratense*, P. de Tonnancour (2, CPTO); MRC Laval, Laval, rue des Charmes (45.5884, -73.8244), 20-VII-2016 (15:00), swept from *Trifolium pratense*, P. de Tonnancour (2, CPTO); MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 10-XI-2016 (15:00), climbing on pale house exterior wall (1, CPTO).

***Coelocephalapion emaciipes* (Fall, 1898), new to Quebec**

Species identification confirmed by RSA, 2016

Note. The occurrence of this small native pale-legged species in the province was expected as it was previously known in Canada from Ontario and the Maritime Provinces. Although this species has been tentatively associated with tick-trefoil, *Desmodium* Desv. sp. (Fabaceae), based on the very few available data at the time (Bright 1993), it is worth noting that most of the specimens caught in 2016 were found in association with *Scirpus* L. spp. (Cyperaceae) in wet habitats.

Specimen data. [MRC Marguerite-D'Youville] Varennes, 30-VI-2014, C. Chantal (1, CCCH); same except: 15-V-2015 (1, CCCH); MRC Vaudreuil-Soulanges, Notre-Dame-de-l'Île-Perrot, 11-V-2016 (13:00), swept from *Scirpus atrovirens* (1, CPTO); same except: 14-V-2016 (15:00) (1, CPTO); [MRC Deux-Montagnes] Parc national d'Oka, 19-V-2016, swept from herbs in field (2, CRVI); MRC Brome-Missisquoi, Saint-Armand, 25-V-2016 (15:00), swept from *Scirpus* sp. (2, CPTO).

Family Curculionidae Latreille, 1802
Subfamily Curculioninae Latreille, 1802
Tribe Anthonomini C.G. Thompson, 1859

***Anthonomus robustulus* LeConte, 1876, new to Quebec**

Species identification confirmed by RSA, 2015

Note. This small native species is characterized by its 6-jointed funicle, compact, short and broad form, and light bluish-gray scales. It is said to occur on goldenrods, *Solidago* L. spp. (Asteraceae) (Blatchley and Leng 1916). It was previously known in Canada from Alberta, Saskatchewan, and New Brunswick (Bousquet et al. 2013).

Specimen data. [MRC Brome-Missisquoi] Saint-Armand, 7-VI-2004, C. Chantal (2, CCCH); same except: 3-VII-2006 (2, CCCH), and 2-VII-2008 (2, CCCH); MRC Vaudreuil-Soulanges, Notre-Dame-de-l'Île-Perrot, 31-V-2011 (13:00), meadow, swept from *Solidago*/*Aster*, P. de Tonnancour (2, CPTO); same except: 1-VI-2011 (14:00) (1, CPTO); [MRC Brome-Missisquoi] Saint-Armand, 3-VIII-2011, C. Chantal (1, CCCH); [MRC Haut-Richelieu] Henryville [dike adjacent to Réserve écologique Marcel-Raymond], 28-V-2013, (14:00–17:00), swept from grasses, *Equisetum* and *Solidago*, C. Chantal and P. de Tonnancour (1, CCCH; 1, CPTO); MRC Haut-Saint-Laurent, Saint-Anicet (45°0422, -74.4473), 14-VI-2013 (18:00), beaten from *Cornus stolonifera*, P. de Tonnancour (1, CPTO); same except: 15-VI-2013 (13:00), wet meadow, swept from various herbaceous plants, P. de Tonnancour (1, CPTO); [MRC La Vallée-du-Richelieu] Mont-Saint-Hilaire, 24-VI-2013, H. Miquet-Sage (1, CHMS); MRC Haut-Saint-Laurent, Franklin, roadside opposite to Ré-

serve écologique du Pin-Rigide, 17-VII-2013 (14:00), beaten from *Lythrum salicaria*, P. de Tonnancour (7, CPTO); MRC Haut-Richelieu, Henryville, dike adjacent to Réserve écologique Marcel-Raymond, 8-VI-2014 (14:00–16:00), swept from grasses, *Equisetum* and *Solidago*, P. de Tonnancour (4, CPTO); [MRC Brome-Missisquoi] Saint-Armand, 16-VI-2014, C. Chantal (1, CCCH); MRC Haut-Richelieu, Henryville, dike adjacent to Réserve écologique Marcel-Raymond, 4-VI-2015, P. de Tonnancour (16:00–18:00) (1, CPTO); [MRC Brome-Missisquoi] Saint-Armand (45.0199, -73.0838), 25-V-2016, S. Dumont (1, CSDU).

Pseudanthonomus helvolus (Boheman, 1843), new to Quebec

Species identification confirmed by RSA, 2016

Note. This native species is associated with witch hazel, *Hamamelis virginiana* L. (Hamamelidaceae) (Clark 1987). Adults emerging from hibernation are active from mid-May to early July, and those from the current-year generation emerge from mid-August to early September and then hibernate until the following spring (DeSteven 1981).

Specimen data. MRC Deux-Montagnes, Parc national d'Oka (45.4916, -74.0137), 30-VI-2015 (17:00), beaten from *Hamamelis virginiana*, P. de Tonnancour & R. Vigneault (4, CPTO; 5, CRVI); same except: 2-VII-2015 (18:00) (16, CPTO) and 5-VII-2015 (18:00) (1, CCCH; 6, CPTO); same except: 5-IX-2015 (17:00), R. Vigneault (1, CPTO) and 20-VIII-2016 (2, CRVI); same except: 27-VIII-2016 (14:00), P. de Tonnancour (2, CNCI; 2 CMNC; 13, CPTO; 1, CSDU); same except: (45.4619, -74.0489), 27-VIII-2016 (16:00) (1, CPTO; 3, CRVI).

Tribe Curculionini Latreille, 1802

Curculio rubidus (Gyllenhal, 1835), new to Canada

Species identification confirmed by RSA, 2015

Note. This record comes three years after the first North American detection of the species in Michigan (Anderson et al. 2013) and is based on the incidental finding in the Montreal area (Notre-Dame-de l'Île-Perrot) of a single specimen in 2013 and of dozens of additional specimens 2–3 years later. This widespread Palaearctic species is easily separated from all North American native *Curculio* species by its very small size (<3.5mm), lack of femoral teeth and association with birch, *Betula* L. spp. All specimens recorded in Quebec were collected in a stand of gray birch, *Betula populifolia* Marshall (Betulaceae), and most were directly beaten from gray birch. Adults are said to be active from May to October in Europe (Hoffmann 1954; as "*Balaninus undulatus* Herbst, 1795"), but all specimens reported herein were captured in August (except

three specimens caught on September 1, 2016). This species is also newly recorded from Ontario, based on a specimen photographed by Burke Korol in Barrie, Simcoe County, on August 21, 2015 and posted on bugguide.net (http://bugguide.net/node/view/1127147).

Specimen data. MRC Vaudreuil-Soulanges, Notre-Dame-de-l'Île-Perrot, 10-VIII-2013 (17:00), beaten from *Quercus rubra*, P. de Tonnancour (1, CPTO); same except: 8-VIII-2015 (15:00), beaten from *Alnus rugosa* (1, CPTO), beaten from *Betula populifolia* (2, CPTO) or swept from various herbaceous plants in gray birch stand (1, CPTO); same except: 10-VIII-2015 (13:00), swept from various herbaceous plants in gray birch stand (2, CPTO); same except: 16-VIII-2015 (15:00), beaten from *Betula populifolia* (4, CCOB; 5, CMNC; 5, CNCI; 18, CPTO; 1, CRVI); 17-VIII-2015 (14:00) (2, CNCI; 2, CPTO); 17-VIII-2015 (14:00 and 18:00) (2, CMNC; 2, CNCI; 11, CPTO); 18-VIII-2015 (19:00) (5, CNCI; 2, CSDU; 1, CRVI); 22-VIII-2015 (14:00), C. Chantal (10, CCCH); 20-VIII-2016 (16:00), P. de Tonnancour (3, CPTO); 23-VIII-2016 (16:00) (1, CPTO); 28-VIII-2016 (16:00) (2, CPTO); 29-VIII-2016 (18:00) (1, CPTO); 1-IX-2016 (13:00) (3, CPTO).

Tribe Smicronychini Seidlitz, 1891

***Smicronyx sculpticollis* Casey, 1892, new to Quebec**

Species identification confirmed by RSA, 2015

Note. This record is based on two specimens collected ten years apart from low vegetation in two localities. This native species was previously known in Canada only from Ontario (Bousquet et al. 2013). It is associated with dodders, *Cuscuta* L. spp. (Convolvulaceae) (Anderson 1962), obligate parasitic leafless vines almost entirely deprived of chlorophyll that wrap around various plants.

Specimen data. [MRC Pierre-De Saurel] Saint-Roch-de-Richelieu, 20-VI-2005, C. Chantal (CCCH, 1); [MRC Deux-Montagnes] Parc national d'Oka, La Grande Baie, 30-VI-2015 [swept from low vegetation in swampy area], R. Vigneault (1, CRVI).

Subfamily Bagoinae C.G. Thompson, 1859

***Bagous magister* LeConte, 1876, new to Quebec**

Species identification confirmed by RSA, 2016

Note. This native species is easily separated from other species of its genus by the deep impressions on the prothorax, the elytral pattern created by fuscous and light brown scales with a fascia crossing the suture near middle, and its large size (Tanner 1943).

It is associated with fragrant water-lily, *Nymphaea odorata* Aiton (Nymphaeaceae) (O'Brien et Marshall 1979). It was previously known in Canada only from Ontario (Bousquet et al. 2013).

Specimen data. MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 31-V-2013 (21:30), UV + porch light, P. de Tonnancour (2, CPTO); same except 30-V-2013 (1, CMNC); same except 23-VI-2013 (1, CMNC); MRC Deux-Montagnes, Parc national d'Oka, 30-VII-2012 (18:00), swept from Cyperaceae, *Polygonum* sp., *Pontederia cordata*, and *Sagittaria* sp., P. de Tonnancour (1, CPTO).

Bagous tanneri O'Brien, 1979, new to Quebec

Species identification confirmed by RSA, 2009, 2016

Note. This native species was previously known in Canada only from Ontario (Bousquet et al. 2013). It feeds in the larval stage on submerged petioles of fragrant water-lily, *Nymphaea odorata* (McGaha 1952).

Specimen data. [MRC Brome-Missisquoi] Saint-Armand, 2-VII-2001, attracted to UV lamp, C. Chantal (1, CCCH); [MRC Haut-Richelieu] Henryville, 24-VI-2003, attracted to UV lamp, C. Chantal (1, CCCH); [MRC Deux-Montagnes] Parc national d'Oka, La Grande Baie, 30-VI-2015 [swept from low vegetation, edge of swampy bay], R. Vigneault (1, CRVI); same except: 2-VII-2015 (16:00), beaten from dead branches, edge of swampy bay, P. de Tonnancour (1, CPTO).

Subfamily Baridinae Schönherr, 1836
Tribe Apostasimerini Schönherr, 1844

Buchananius striatus (LeConte, 1876), new to Canada

Species identification confirmed by RSA, 2015

Note. This minute native species (1.4–1.6mm) is easily distinguished from all other Baridinae occurring in Quebec by its extremely wide and convex shape, its tiny size (genus *Buchananius* Kissinger, 1957, contains the smallest members of Nearctic Baridinae) and its vestiture of sparse but long erect scales. The only other North American congener, *Buchananius sulcatus* (LeConte, 1876), has been recorded as developing in the fruiting bodies of the fungus *Trichoderma peltatum* (Berk.) Samuels, Jaklitsch & Voglmayr (Hypocreaceae) growing on American Beech, *Fagus grandifolia* Ehrh. (Fagaceae), in Maryland (Prena et al. 2014). This species also represents a new record at the generic level for Canada.

Specimen data. [MRC Joliette] Joliette, 7-IX-2013 [swept from forest understory], J.-F. Roch (1, CCCH); [MRC Deux-Montagnes] Parc national d'Oka, La Grande

Baie, 28-VI-2014 [beaten/swept from undergrowth/fallen branches in deciduous stand], R. Vigneault (1, CRVI); same except: composting site, 28-V-2016 (19:00), white tulle fabric flight interception trap, R. Vigneault (1, CRVI); same except: Calvaire d'Oka, 1-VII-2016, beaten from fallen dead branches of deciduous tree, R. Vigneault (1, CRVI).

Plocamus echidna (LeConte, 1876), new to Quebec

Species identification confirmed by RSA, 2016

Note. This remarkable native species was previously known in Canada only from Ontario (Bousquet et al. 2013). The circumstances under which all specimens caught in 2016 were found closely match the description provided by Drury (quoted by Blatchley and Leng 1916): "This curious little porcupine beetle was in clusters on trunk of a dead beech tree, near Cincinnati, Sept. 27, 1900. I took one cluster of 30; they very closely resemble the color of the bark". A photograph of the 2015 specimen reported herein is posted on bugguide.net (http://bugguide.net/node/view/1078735/bgimage).

Specimen data. [MRC Deux-Montagnes] Parc national d'Oka, composting site, 04-VI-2015 (18:00), white tulle fabric flight interception trap, R. Vigneault (1, CRVI); MRC Deux-Montagnes, Parc national d'Oka, La Grande Baie, 3-VII-2016, brushed from trunk of a recently dead *Fagus grandifolia*, R. Vigneault (18, CRVI); same except: 6-VII-2016 (12:00), P. de Tonnancour (1, CCCH; 1, CNCI; 16, CPTO; 1, CSDU); same except: 13-VII-2016 (17:00), P. de Tonnancour & R. Vigneault (1, CMNC; 4, CPTO, 4, CRVI); same except: 24-VII-2016 (17:00), P. de Tonnancour, R. Vigneault & S. Laplante (3, CPTO; 1, CRVI; 3, CSLA); same except: 1-VIII-2016, R. Vigneault (1, CRVI); same except: 20-VIII-2016 (2, CRVI).

Subfamily Ceutorhynchinae Gistel, 1848
Tribe Ceutorhynchini Gistel, 1848

Ceutorhynchus bolteri Dietz, 1896, new to Quebec

Species identification confirmed by RSA, 2014, 2016

Note. This native species was previously recorded in Canada only from British Columbia (Bousquet et al. 2013), but it is known to occur in several states in eastern United States (O'Brien and Wibmer 1982). The British Columbia specimen (CNCI) was collected on spotted water-hemlock, *Cicuta occidentalis* Greene (now *Cicuta maculata* L.) (Apiaceae).

Specimen data. [MRC Haut-Richelieu], Henryville, 28-V-2013, sweeping, C. Chantal (1, CCCH); MRC Deux-Montagnes, Parc national d'Oka, 29-V-2015 (18:00–20:00), white tulle fabric flight interception trap, P. de Tonnancour (1, CPTO); MRC

Haut-Richelieu, Henryville, dike adjacent to Réserve écologique Marcel-Raymond, 4-VI-2015 (16:00–18:00), swept from grasses, *Equisetum* and *Solidago*, P. de Tonnancour (5, CPTO); same except: 12-V-2016 (13:00–16:00) (8, CPTO).

Ceutorhynchus pallidactylus (Marsham, 1802), new to Quebec

Species identification confirmed by PB, 2014

Note. This adventive Palaearctic species, known as the cabbage stem weevil, is reported to attack several Brassicaceae and Resedaceae and is occasionally associated with *Cannabis sativa* L. (Cannabaceae) (Colonnelli 2004). It was previously known in Canada only from Nova Scotia (Bousquet et al. 2013), where it was first detected in 1994 (Majka et al. 2007a).

Specimen data. [MRC Coaticook] Missisquoi Co., Mont le Pinacle, 10-VI-1984, Larochelle, Larivière (1, CNCI); [MRC Nouvelle-Beauce] East of St-Lambert-de-Lauzon, Rd. 218, 18-VII-2001, 46°36,133'N; 71°11.412'W, corn field with radish, Mason, Sarazin & Boudreault, QC 2001–110 (1, CNCI); same except: QC 2001–100 (1, CNCI); [MRC de l'Érable] NE of Plessisville, Road 116, 18-VII-2001, 46°18.796'N; 71°40.129'W, small canola field, Mason, Sarazin & Boudreault, QC 2001-330 (1, CNCI); [MRC Arthabaska] Saint-Albert, Hwy 122, 12-VII-2002, 46°00.455'N; 72°06.016'W, wild radish along edge of corn field, Mason, Boudreault & Farmakis, QC 2002-213 (1, CNCI); same except: QC 2002-214 (1, CNCI); [MRC Drummond] Domaine-Descoteaux, 22-VII-2003, 45°49.142'N; 72°13.983, J. Miall & P. Mason, wild mustard, QC03-121 (1, CNCI); [MRC Drummond] St-Guillaume, 22-VII-2003, 45°54.909'N; 72°44.660'W, J. Miall & P. Mason, wild mustard, QC03-116 (1, CNC); [MRC Drummond] S[ain]t-Cyrille-de-Wendover, north-east, 45°57.049'N; 72°23.877'W, 22-VII-2003, J. Miall & P. Mason, wild radish, QC03-119 (2, CNCI); [MRC Pierre-De Saurel] S[ain]te-Victoire, Hwy 239, 2km east, 45°56.580'N; 73°04.189'W, 22-VII-2008, ex. stem of *Raphanus raphanistrum*, em[ergence] 26-VIII-2008, Mason, Miall & Brauner, Sitre QC 08-710 (3, CNCI); same except: 22-VII-2003, 45°57.744'N; 73°06.760'W, J. Miall & P. Mason, wild radish, QC 03-114 (1 CNCI); Centre-du-Québec, [MRC Arthabaska] Saint-Rosaire, 19-VII-2012, swept from canola (1, CPTO); [MRC Coaticook] Compton, 27-VI-2014, C. Levesque (1, CNCI); same except: 24-VII-2014 (2, CNCI); same except: 1-VIII-2014 (2, CNCI).

Ceutorhynchus pauxillus Dietz, 1896, new to Quebec

Species identification confirmed by RSA, 2014, and Hiraku Yoshitake, 2014

Note. This native species was previously known in Canada from Alberta, Saskatchewan, and Manitoba (Bousquet et al. 2013). The host plant for this species is unknown (Colonnelli 2004).

Specimen data. [MRC de D'Autray] Lanoraie, 26-VIII-1986, sweeping Sphagnum bog, L. LeSage, on *Prunus pensylvanica* Linnaeus (39, CMNC; 16, CNCI); MRC Marguerite-D'Youville, Verchères, 4-VI-2010, C. Chantal (1, CCCH); MRC Vaudreuil-Soulanges, Saint-Lazare, 9-VI-2013 (15:00), sandpit, beaten from *Erysymum* sp., P. de Tonnancour (3, CPTO); same except: 12-VI-2013 (14:00), beaten from *Brassica* sp. (3, CPTO); same except: 14-VI-2013 (13:00) (1, CNCI; 1, CPTO), 19-VI-2013 (14:00) (9, CPTO); same except: 6-VI-2014 (13:00), swept from *Equisetum* and grasses (1, CPTO), 10-VI-2014 (17:00) (2, CPTO); same except: 23-VI-2014 (17:00), swept from *Equisetum* (2, CMNC; 4, CPTO).

Hadroplontus litura (Fabricius, 1775), new to Quebec

Species identification confirmed by RSA, 2016.

Note. This Palaearctic species has been introduced in various parts of North America as a biological control agent against Canada thistle, *Cirsium arvense* (L.) Scop. (Asteraceae) (McClay et al. 2002), an invasive plant also of Palaearctic origin. It was previously known in Canada from British Columbia, Alberta, Saskatchewan, Ontario, and Nova Scotia (Bousquet et al. 2013). All specimens reported herein were beaten from Canada thistle.

Specimen data. Montreal, Parc Zotique-Racicot (45.5427, -73.6903), beaten from *Cirsium arvense*, P. de Tonnancour and/or S. Dumont, 8-VII-2015 (13:00) (17, CPTO; 4, CSDU); 9-VII-2015 (3, CMNC; 3, CNCI; 2, CSDU); 10-VII-2015 (4, CCCH); 12-VII-2015 (16:00) (5, CPTO); 14-VII-2015 (15:00) (6, CPTO); 26-VII-2015 (2, CMNC; 2, CNCI; 2, CSDU); 25-VIII-2015 (1, CSDU); 01-IX-2015 (13:00) (1, CRVI); same except: (45.5426, -73.69O2), 28-VI-2016 (13:00) (7, CPTO; 2, CSDU); 30-VI-2016 (4, CCCH; 4 CPTO; 2, CSDU); same except: 4-VII-2016 (6, CSDU); MRC Vaudreuil-Soulanges, Ville de l'Île-Perrot, 11-VII-2016 (15:00), beaten from *Cirsium arvense*, P. de Tonnancour (1, CPTO); MRC Laval, Laval (45.5819, -73.8206), 20-VII-2016 (14:00), beaten from flowering *Cirsium arvense*, P. de Tonnancour (15, CPTO); Montreal, Parc Zotique-Racicot (45.5427, -73.6903), 26-VII-2016, beaten from *Cirsium arvense*, S. Dumont (2, CSDU); same except: 28-VII-2016 (4, CSDU); MRC Laval, Laval (45.5819, -73.8206), 17-IX-2016, beaten from flowering *Cirsium arvense*, P. de Tonnancour (5, CPTO).

Sirocalodes sericans (LeConte, 1876), new to Quebec

Species identification confirmed by Hiraku Yoshitake, 2014

Note. This native species was previously known in Canada from Manitoba and Ontario (Bousquet et al. 2013), but its presence in Ontario was reported for the first time only recently (Proctor et al. 2010) based on one specimen collected in Algonquin Provincial Park in 2007. The host plant is unknown (Anderson et al. 2014).

Specimen data. MRC Vaudreuil-Soulanges, Saint-Lazare, 12-VI-2013 (14:00), sandpit, beaten from *Brassica* sp., P. de Tonnancour (1, CPTO).

Subfamily Conoderinae Schönherr, 1833
Tribe Zygopini Lacordaire, 1865

Cylindrocopturus longulus (LeConte, 1876), new to Quebec

Species identification confirmed by Hiraku Yoshitake, 2014, and RSA, 2016.

Note. This native species is reported to inhabit in the larval stage the galls formed by the apionine weevil *Podapion gallicola* Riley, 1883, on pine (Blatchley and Leng 1916). In western North America, it is also a reported host of the *Macromesus americanus* Hedqvist, 1960 (Hymenoptera: Pteromalidae), which has been reared from various pines and several other conifers (Askew and Shaw 2001). *Cylindrocopturus longulus* was previously known in Canada only from Ontario, but the gall making species *Podapion gallicola* is known from Ontario, Quebec and New Brunswick (Bousquet et al. 2013).

Specimen data. MRC Vaudreuil-Soulanges, Notre-Dame-de-l'Île-Perrot, 30-IV-2013 (16:00), beaten from flowering shoots of *Salix* sp., P. de Tonnancour (1, CPTO); MRC Vaudreuil-Soulanges, Mont Rigaud, 31-V-2013 (13:00), beaten from *Asclepias syriaca*, P. de Tonnancour (1, CPTO); same except: 5-VI-2013 (13:00), rocky outcrop, swept from *Rumex acetosella* (1, CPTO); same except: 2-V-2015 (15:00), rocky outcrop, beaten from *Pinus strobus*, P. de Tonnancour (3, CPTO); MRC Collines-de-l'Outaouais, Luskville (Sentier des chutes), 26-V-2015 (13:00), beaten from small *Amelanchier* sp., P. de Tonnancour (1, CPTO).

Subfamily Entiminae Schönherr, 1823
Tribe Cyphicerini Lacordaire, 1863

Myosides seriehispidus Roelofs, 1873, new to Quebec

Species identification confirmed by RSA, 2016

Note. This adventive species, originally from Asia, has gone undetected for many years in collections under the genus *Trachyphloeus* Germar, 1817, and was reported by O'Brien (2000) as established in several eastern states since at least 1973. In Canada, it was known until now only from Ontario (Bousquet et al. 2013). Only females are known to occur in North America (Bright and Bouchard 2008).

Specimen data. [MRC Brome-Missisquoi], Saint-Armand, 6-VII-2015 (afternoon), C. Chantal (1, CCCH).

Subfamily Hyperinae Marseul, 1863
Tribe Hyperini Marseul, 1863

***Hypera rumicis* (Linnaeus, 1758), new to Quebec**

Species identification confirmed by Hiraku Yoshitake, 2014

Note. Since its accidental introduction and first detection in the United States in 1879 (Chamberlin, 1933), this Palaearctic species has expanded its range considerably in North America. Surveys conducted from 1997 to 1999 in two Quebec vineyards failed to detect its presence (Bouchard et al. 2005), but its capture by C. Tessier in 2003 indicates that it was already present in the province more than a decade ago. *Hypera rumicis* is associated with various *Polygonum* L. spp. and *Rumex* spp. (Polygonaceae), especially the invasive curled dock, *Rumex crispus* L., also introduced from Europe. Its potential as a biological control agent against this weed was recently assessed (DeGregorio et al. 1992; Piesik 2006). This species was previously known in Canada from Alberta, Saskatchewan, Manitoba, and Ontario (Bousquet et al. 2013).

Specimen data. [MRC Brome-Missisquoi], Saint-Armand, 15-VI-2003, C. Tessier (1, CCTE); MRC Vaudreuil-Soulanges, Notre-Dame-de-l'Île-Perrot, 3-VII-2011 (17:00), beaten from *Rumex crispus*, P. de Tonnancour (1, CPTO); MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 6-VII-2011 (2:00), UV + porch light, P. de Tonnancour (1, CPTO); MRC Haut-Saint-Laurent, Saint-Anicet (45.0425, -74°4459), 15-VI-2013 (13:00), wet meadow, swept from various herbaceous plants, P. de Tonnancour (2, CPTO); Montreal, Île-Bizard (Parc-nature du Bois-de-l'Île-Bizard), 17-VI-2013, ≥ 5 cocoons on *Rumex* sp. (one emergence on 22-VI-2013), C. Pilon (observation documented by photos); MRC Haut-Saint-Laurent, Saint-Anicet (45.0432, -74°4442), 26-VI-2015 (15:00), beaten from *Rumex crispus*, P. de Tonnancour (11, CPTO); MRC Coaticook, Waterville (45.27993 N 71.89987 O), 10-VII-2015 (20:00), beaten from *Rumex crispus*, P. de Tonnancour (4, CCCH; 7, CMNC; 2, CSDU; 1, CRVI); same except 11-VII-2015 (10:00), H. Miquet-Sage, P. de Tonnancour, S. Dumont (7, CHMS; 18, CPTO; 7, CSDU, 1, CRVI); MRC Haut-Richelieu, Henryville, dike adjacent to Réserve écologique Marcel-Raymond, 12-V-2016 (13:00–16:00), swept from grasses, *Equisetum* and *Solidago*, P. de Tonnancour 12-V-2016 (1, CPTO).

Subfamily Lixinae Schönherr, 1823
Tribe Lixini Schönherr, 1823

***Lixus punctinasus* LeConte, 1876, first records for Canada with detailed locality information**

Species identification confirmed by RSA, 2015

Note. Bousquet et al. (2013) listed this species without providing any details on its distribution in Canada, based on a similar inclusion in O'Brien and Wibmer (1982). We

provide specific locality data for Canada for the first time. Like other *Lixus* Fabricius, 1801 spp., this species is probably associated with *Polygonum* spp. (Polygonaceae). Numerous CMNC specimens from Texas were collected on *Polygonum*.

Specimen data. MRC Vaudreuil-Soulanges, Notre-Dame-de-l'Île-Perrot, 3-VII-2008 (17:00), handpicked from building wall, P. de Tonnancour (1, CPTO); same except: 23-VIII-2014 (15:00), small pond margin, beaten from *Bidens cernua*, P. de Tonnancour (1, CPTO).

Lixus terminalis LeConte, 1876, new to Quebec

Species identification confirmed by RSA, 2015

Note. This species was reported to be associated with *Polygonum amphibium* L. (now *Persicaria amphibia* (L.) Delarbre) (Polygonaceae) more than a century ago (Beutenmuller 1893). We also found it to be common on this same species of plant in Oka.

Specimen data. [MRC Deux-Montagnes] Parc national d'Oka, 4-V-1993, R. Vigneault (1, CRVI); same except: 9-V-1993 (1, CRVI), 30-V-1995 (1, CRVI); [MRC Deux-Montagnes] Parc national d'Oka, 26-V-2002, flowers of *Prunus virginiana*, C. Chantal (1, CCCH); [MRC Deux-Montagnes] Parc national d'Oka, La Grande Baie, 28-V-2002, R. Vigneault (1, CRVI); same except: 4-V-2003 (1, CRVI); [MRC Deux-Montagnes] Parc national d'Oka, Calvaire d'Oka, 15-VII-2007, R. Vigneault (1, CRVI); [MRC Deux-Montagnes] Parc national d'Oka, 16-VI-2011, R. Vigneault (1, CRVI); [MRC Deux-Montagnes] Parc national d'Oka, 1-VIII-2012 (16:00–17:00), swept from *Polygonum* sp., P. de Tonnancour & R. Vigneault (5, CPTO; 2, CRVI); same except: 19-VIII-2012 (17:00), swept from *Polygonum amphibium*, P. de Tonnancour (2, CMNC; 21, CPTO); same except: 26-VIII-2012 (17:00) (4, CPTO); same except: 18-V-2013 (15:00), beaten from *Crataegus* sp., P. de Tonnancour (1, CPTO); same except: 25-V-2014, composting site, white tulle fabric flight interception trap, R. Vigneault (1, CRVI).

Subfamily Molytinae Schönherr, 1823
Tribe Cleogonini Gistel, 1848

Rhyssomatus aequalis Horn, 1873, first records for Quebec with detailed locality information

Species identification confirmed by RSA, 2015

Note. This native species was known in Canada only from Ontario (McNamara 1991) until Bousquet et al. (2013) recorded it from Quebec without providing any specific details about its distribution within the province. Before the recent addition of a few speci-

mens from the series reported herein, the CNCI contained 33 specimens from Canada, all collected by W.J. Brown in extreme southern Ontario between 1931 and 1940, 17 of them on "*Convolvulus sepium pubescens*" (hedge false bindweed, now known as *Calystegia sepium* (L.) R. Br. (Convolvulaceae)). Based on these label data and on those of most specimens reported henceforth, *R. aequalis* appears to be associated with *C. sepium*.

Specimen data. MRC Haut-Saint-Laurent, Saint-Anicet (45.0425, -74°4459), 15-VI-2013, wet meadow, swept from various herbaceous plants, P. de Tonnancour & S. Laplante (1, CPTO; 2, CSLA); Montreal, Parc Zotique-Racicot (45.5436, 73.69O3), 8-VII-2015 (13:00), beaten from *Castylegia sepium* + *Cirsium arvense*, P. de Tonnancour (1, CPTO); same except: 9-VII-2015, S. Dumont (2, CSDU), 24-VII-2015 (4, CPTO); same except: 26-VII-2105, beaten from *Castylegia sepium* + *Cirsium arvense*, S. Dumont (1, CMNC; 1, CNCI; 1, CSDU); same except: 25-VIII-2015, beaten from *Castylegia sepium* + *Cirsium arvense*, S. Dumont (2, CPTO; 2, CSDU); same except: 1-IX-2015 (13:00), beaten from *Castylegia sepium*, P. de Tonnancour & S. Dumont (1, CMNC; 1, CNCI; 6, CPTO; 1, CSDU); same except: 7-VI-2016 S. Dumont (13, CSDU; 10, CCCH); same except: 10-VI-2106 (8, CSDU); 14-VI-21016 (11, CSDU); MRC Vaudreuil-Soulanges, Ville-de-l'Île-Perrot, 15-VI-2016 (12:00), beaten from *Castylegia sepium*, P. de Tonnancour (2, CPTO); Montreal, Parc Zotique-Racicot (45.5436, 73.69O3), 16-VI-2016, beaten from *Castylegia sepium*, S. Dumont (1, CSDU); MRC Vaudreuil-Soulanges, Notre-Dame-de-l'Île-Perrot, 17-VI-2016 (12:30), beaten from *Castylegia sepium*, P. de Tonnancour (3, CPTO); MRC Vaudreuil-Soulanges, Ville-de-l'Île-Perrot (45.3970, -73.9629), 18-VI-2016 (12:00), beaten from *Castylegia sepium*, P. de Tonnancour (1, CPTO); MRC Vaudreuil-Soulanges, Notre-Dame-de-l'Île-Perrot, 21-VI-2016 (17:00), beaten from *Castylegia sepium*, P. de Tonnancour (4, CPTO); Montreal, Parc Zotique-Racicot (45.5436, 73.69O3), 23-VI-2016, beaten from *Castylegia sepium*, S. Dumont (1, CSDU); same except: 28-VI-2015 (13:00), P. de Tonnancour (14, CPTO); same except: 30-VI-2016, S. Dumont (2, CSDU); same except: 4-VII-2016 (2, CSDU); same except: 26-VII-2016 (2, CSDU); same except: 28-VII-2016 (1, CSDU); same except: 18-VIII-2016 (1, CSDU).

Tribe Conotrachelini Jekel, 1865

Conotrachelus buchanani Schoof, 1942, new to Canada

Species identification confirmed by RSA, 2015

Note. This native species is associated with *Celtis* L. spp. (Cannabaceae) (Schoof 1942), specifically common hackberry, *Celtis occidentalis* L., in Quebec. All specimens collected in Montreal were beaten from common hackberry, and all those from Terrasse-Vaudreuil were attracted to a light source located no more than 10 m from a hackberry tree. Hackberry has been favoured as a street tree and planted in great numbers in some boroughs by the City of Montreal between 1972 and 1984 (QuéBio 2016), obviously

much to the benefit of the weevil. Records provided herein represent a significant northerly extension of the range of this species which was previously only known from as far north as Pennsylvania (O'Brien and Wibmer 1982).

Specimens from southern USA were examined and found to be consistently larger than the northern forms from Quebec and northern USA, but dissections failed to reveal any further significant differences between the two groups. The status of the Canadian and northern USA forms needs further study. For the time being specimens reported herein will be considered as *C. buchanani*.

Specimen data. [MRC Brome-Missisquoi], Saint-Armand, 5-VI-2007, C. Chantal (1, CCCH); MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 21-V-2009 (21:00–22:00), mercury vapour light, P. de Tonnancour (1, CPTO); same except: 18-VI-2010 (23:00), mercury vapour + UV + porch light, P. de Tonnancour (1, CPTO); same except: 6-VII-2011 (23:00), UV + porch light, P. de Tonnancour (1, CPTO); MRC Marguerite-D'Youville, Contrecœur, 8-VII-2012 (0:30), mercury vapour + UV light, P. de Tonnancour (1, CPTO); [MRC La Vallée-du-Richelieu] Mont-Saint-Hilaire, 2-VI-2013, H. Miquet-Sage (2, CHMS); MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 21-IX-2014 (21:00), UV + porch light, P. de Tonnancour (1, CPTO); Montreal, Parc Zotique-Racicot (45.5424, -73.6874), 19-VI-2015, beaten from *Celtis occidentalis*, S. Dumont (3, CMNC; 3, CNCI; 3, CSDU); same except: 2-VII-2015 (5, CSDU); Montreal, 11875, rue Zotique-Racicot (45.5424, -73.6901), beaten from *Celtis occidentalis*, 8-VII-2015, P. de Tonnancour & S. Dumont (6, CPTO; 1, CSDU); same except: 12-VII-2015 (16:00), P. de Tonnancour (2, CPTO); same except: 9-VII-2015, S. Dumont (2, CMNC; 2, CNCI; 1, CSDU); same except: 16-VIII-2015 (6, CMNC; 6, CNCI; 1, CSDU); 21-VIII-2015 (2, CSDU); 25-VIII-2015 (3, CSDU); same except: 1-IX-2015, P. de Tonnancour & S. Dumont (21, CPTO; 2, CSDU); same except: 12-X-2015, S. Dumont (2, CSDU); same except: 22-V-2016 (3, CSDU); same except: 24-V-2016 (5, CSDU); MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 30-V-2016 (01:00), UV + porch light, P. de Tonnancour (1, CPTO); Montreal, Parc Zotique-Racicot (45.5424, -73.6874), 7-VI-2016, beaten from *Celtis occidentalis*, S. Dumont (9, CSDU); same except: 14-VI-2016 (1, CSDU); same except: 27-VI-2016, UV light (1, CSDU); MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 27-VI-2016 (22:45), UV + porch light, P. de Tonnancour (1, CPTO); Montreal, Parc Zotique-Racicot (45.5424, -73.6874), 30-VI-2016, beaten from *Celtis occidentalis*, S. Dumont (10, CCCH; 7, CSDU); same except: 8-VIII-2016 (13, CSDU); same except: 18-VIII-2016 (3, CSDU).

Conotrachelus pusillus LeConte, 1878, new to Canada

Species identification confirmed by RSA, 2015, 2016

Note. This native species was previously known to occur in eastern North America from New York and Florida to Kansas and Texas (O'Brien and Wibmer 1982). Host plants are unknown.

Specimen data. [MRC Deux-Montagnes] Parc national d'Oka, composting site, 23-VII-2011, R. Vigneault (1, CRVI); same except: plage d'Oka, 2-VIII-2011 (1, CRVI); [MRC Marguerite-D'Youville] Varennes, 8-IX-2015, attracted to UV lamp, C. Chantal (1, CCCH); MRC Deux-Montagnes, Parc national d'Oka, 21-VII-2015 (1:00), beaten from foliage of *Carya ovata*, P. de Tonnancour (1, CPTO).

Conotrachelus recessus (Casey, 1910), new to Quebec

Species identification confirmed by RSA, 2015

Note. This small *Conotrachelus* Dejean, 1835 was previously known in Canada only from Ontario (Bousquet et al. 2013). It is superficially similar to a *Tychius* Germar, 1817 sp. and was in fact originally described by Casey in the tribe Tychiini (Curculioninae) as the type of the monobasic genus *Loceptes* Casey, 1910 (Schoof 1942). It can be separated from its congeners by its very small size (2.5 – 3.0mm), golden colored scales and recurved elytral setae. Available data on host plants are inconclusive.

Specimen data. MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 19-VI-2014 (0:00), attracted to UV + porch light, P. de Tonnancour (1, CPTO).

Subfamily Scolytinae Latreille, 1804
Tribe Phloeotribini Chapuis, 1869

Phloeotribus dentifrons (Blackman, 1921), new to Quebec

Species identification confirmed by Hume Douglas, 2016

Note. This minute native species (1.2–1.6mm) was previously known to occur in Canada only in the southernmost part of Ontario (all 61 CNCI Canadian specimens are from Point Pelee National Park). As for the above-mentioned *Conotrachelus buchanani*, this native species is associated with *Celtis* spp. (Wood 1982), specifically common hackberry, *Celtis occidentalis*, in Quebec. It is probably more widely distributed than currently known in Quebec, as it was found in close association with its host plant in three different localities. It has also been reared recently (2016) from dead branches of *Celtis occidentalis* in Almonte, Ontario, ca. 30 km from the Quebec border (Hume Douglas, pers. comm. 2017).

Specimen data. MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil (45.3923, -73.9922), 20-IX-2013 (18:00), white tulle fabric flight interception trap, P. de Tonnancour (1, CPTO); same except: 20-V-2016 (16:30) (1, CPTO); Montreal, rue Zotique-Racicot (45.5436, -73.6901), 21-VIII-2015, beaten from *Celtis occidentalis*, S. Dumont (1, CSDU); same except: 21-V-2016 (9, CSDU); same except: 22-V-2016 (4, CSDU); same except: 23-V-2016 (7, CPTO); same except: 24-V-2016 (3, CSDU); same except: 7-VI-2016 (1, CSDU); MRC Laval, Laval, rue des Charmes (45.5888,

-73.8268), 20-VII-2016 (15:00), beaten from *Celtis occidentalis*, P. de Tonnancour (1, CPTO); MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil (45.3927, -73.9922), 20-VII-2016, ex-larva from dead branch of *Celtis occidentalis*, P. de Tonnancour (3, CPTO); same except: 28-VII-2016 (1, CPTO); same except: 14-VIII-2016 (2, CPTO); same except: 15-VIII-2016 (1, CPTO); same except : 18-III-2017 (8, CNCI); MRC Laval, Laval, rue des Charmes (45.5846, -73.8226), 2-IV-2017, ex-larva from dead branch of *Celtis occidentalis*, P. de Tonnancour (5, CPTO).

Tribe Scolytini Latreille, 1804

Scolytus muticus Say, 1824, new to Quebec

Species identification confirmed by Hume Douglas, 2016

Note. As for the above-mentioned *Phloeotribus dentifrons*, this native species was previously thought to be confined in Canada to the southernmost part of Ontario (all 11 CNCI Canadian specimens are from Pelee Island and Point Pelee National Park). It occurs in association with common hackberry, *Celtis occidentalis*, in Quebec, but also with dwarf hackberry, *Celtis tenuifolia* Nutt. (Smith and Cognato 2014), an endangered species, in southern Ontario (COSEWIC 2003). At 2.2–5.3mm, it is the largest member of the genus known to occur in Quebec.

Specimen data. MRC Vaudreuil-Soulanges, Terrasse-Vaudreuil, 14-VI-2016 (14:00), white tulle fabric flight interception trap, P. de Tonnancour (1, CPTO); MRC Laval, Laval, rue des Charmes (45.5846, -73.8226), 6-VII-2016 (15:00), beaten from *Celtis occidentalis*, P. de Tonnancour (1, CPTO).

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